

### REMARKS

In response to the action of February 1, 2006, applicants asks that all claims be allowed in view of the amendment to the claims and the following remarks.

Claims 1-7, 9, 14 and 27-71 are currently pending, of which claims 1, 27, 36, 45, 54 and 63 are independent. Claims 1, 27, 36, 45, 54 and 63 have been amended. Support for these amendments may be found in the application at, for example, page 20, lines 3-24 and FIGS. 2A and 10B. No new matter has been added.

Initially, as an administrative matter, applicant notes that an initialed copy of the Form PTO-1449 filed on February 10, 2004 with the application has not yet been received. It is therefore respectfully requested that the Examiner consider the references and return a copy of the initialed Form PTO-1449 to applicant. For the Examiner's convenience, a courtesy copy of the Form PTO-1449 filed on February 10, 2004 is provided.

Claims 1-7, 9, 14 and 27-71 have been rejected as being anticipated by Kato, U.S. Patent Application Publication No. 2003/0231263. Applicant requests reconsideration and withdrawal of the rejection because Kato does not describe or suggest the subject matter of the independent claims, as described more fully below.

As amended, claim 1 is directed to a semiconductor device having a substrate, a pixel portion over the substrate, a driving circuit over the substrate, and a layer including an integrated circuit. The driving circuit and the integrated circuit each have at least one terminal. In particular, the driving circuit has at least one first terminal, and the integrated circuit has at least one second terminal and is at least partially overlapped with the driving circuit. The first terminal and the second terminal face each other and are electrically connected via a conductive material. The layer that includes the integrated circuit does not overlap the pixel portion.

Kato, by contrast, describes an active matrix semiconductor display device having an active matrix liquid crystal display portion in which a liquid crystal layer is sandwiched by a pixel substrate and an opposing substrate. The pixel substrate includes a pixel region and a gate signal line driving circuit. The opposing substrate includes a source signal line driver circuit and a logic circuit. See Kato at paragraph [0076]. Notably, Kato discloses an integrated circuit layer that overlaps the pixel portion. See Kato at FIG. 6D.

For at least these reasons, applicant requests reconsideration and withdrawal of the rejection of claim 1 and claims 2-7, 9 and 14, which depend from amended claim 1.

Independent claim 27, as amended, recites an integrated circuit that at least partially overlaps a driving circuit and that has an adhesive layer between the integrated circuit and the driving circuit. The integrated circuit includes a first transistor that at least partially overlaps the adhesive layer. The integrated circuit also includes a second transistor that at least partially overlaps the adhesive layer. Applicant requests reconsideration and withdrawal of this rejection at least because Kato does not describe or suggest an integrated circuit that includes a first transistor that at least partially overlaps the adhesive layer and a second transistor that at least partially overlaps the adhesive layer.

The rejection indicates that circuits 402-404 are driving circuits and circuits 413-415 are integrated circuits. However, circuits 414 and 415 are merely representative elements of circuits 402, 403 and 404, and circuit 413 represents the pixel region 401. See Kato at paragraphs [0077-78]. In addition, the rejection indicates that Kato discloses “an integrated circuit 413, 414, 415 at least partially overlapped with the driving circuit, with an adhesive layer therebetween” at page 10, paragraph [0151] and FIGS. 1A-1C and 6D. Paragraph [0151] states:

Thereafter, an orientation film 5043 is formed on a portion at least containing the pixel electrode 5042, and a rubbing process is performed thereto. Note that, in this embodiment mode, a columnar spacer 5045 for maintaining a substrate interval is formed at a desired position by patterning an organic resin film such as an acrylic resin film before the orientation film 5043 is formed. Further, a spherical spacer may be scattered over the surface of the substrate instead of the columnar spacer. Further more, a color filter can be formed appropriately before the formation of the orientation film 5043.

Kato at paragraph [0151]. As such, the rejection appears to suggest that columnar spacer 5045 in FIG. 6D corresponds to the claimed adhesive layer. Even assuming, for the sake of argument only, that this correspondence is correct, Kato does not describe or suggest an integrated circuit that includes a first transistor that at least partially overlaps the adhesive layer and a second transistor that at least partially overlaps the adhesive layer, as recited in amended claim 27. Rather, as shown in Kato's FIG. 6D, the columnar spacer 5045 overlaps the pixel TFT and does not overlap the N channel TFT or the P channel TFT. Hence, the columnar spacer 5045 overlaps only one transistor included in the integrated circuit. Accordingly, the columnar spacer 5045

does not overlap two transistors included in the integrated circuit (presumably including integrated circuits 413-415).

Therefore, Kato does not describe or suggest, in FIG. 6D or anywhere else, an integrated circuit that includes a first transistor that at least partially overlaps the adhesive layer and a second transistor that at least partially overlaps the adhesive layer, as recited in amended claim 27.

For at least these reasons, applicant requests reconsideration and withdrawal of the rejection of claim 27 and its dependent claims 28-35.

Similarly to claim 27, independent claim 45, as amended, recites an integrated circuit that includes a first transistor that at least partially overlaps the adhesive layer and a second transistor that at least partially overlaps the adhesive layer.

Accordingly, at least for the reasons discussed above with respect to claim 27, applicant requests reconsideration and withdrawal of the rejection of independent claim 45 and its dependent claims 46-53.

As amended, independent claim 36 recites a semiconductor device including a first layer including a pixel portion over a substrate and a driving circuit over the substrate. The semiconductor device also includes a second layer including a first integrated circuit that at least partially overlaps a driving circuit. The semiconductor device further includes a third layer that includes a second integrated circuit, where the second integrated circuit at least partially overlaps the first integrated circuit.

The rejection indicates that Kato discloses, in FIG. 6D, a semiconductor device including a substrate, a pixel portion over the substrate, a driving circuit over the substrate, a first integrated circuit that at least partially overlaps a driving circuit, and a second integrated circuit that at least partially overlaps the first integrated circuit. Even assuming, for the sake of argument only, that this assertion is correct, Kato shows in FIG. 6D two layers of circuits. In such a case, however, the limitations of claim 36, as amended, are not met because Kato does not disclose a third layer including a second integrated circuit that at least partially overlaps the first integrated circuit.

For at least these reasons, applicant requests reconsideration and withdrawal of the rejection of claim 36 and its dependent claims 37-44.

Similarly to claim 36, independent claim 54, as amended, recites a semiconductor device including a substrate and a first layer including a pixel portion over the substrate and a driving circuit over the substrate. The semiconductor device also includes a second layer that includes a first integrated circuit that at least partially overlaps the driving circuit and a first adhesive layer therebetween. The semiconductor device further includes a third layer including a second integrated circuit that at least partially overlaps the first integrated circuit and with a second adhesive layer therebetween.

Accordingly, at least for the reasons discussed above with respect to claim 36, applicant requests reconsideration and withdrawal of the rejection of independent claim 54 and its dependent claims 55-62.

Similarly to claim 36, independent claim 63, as amended, recites a semiconductor device including a substrate and a first layer including a pixel portion over the substrate and a driving circuit over the substrate. The semiconductor device also includes a second layer that includes a first integrated circuit having at least one second terminal and at least one third terminal, at least partially overlaps the driving circuit, and with a first adhesive layer therebetween. The semiconductor device further includes a third layer including a second integrated circuit having at least one fourth terminal and at least partially overlapped with the first integrated circuit, with a second adhesive layer therebetween.

Accordingly, at least for the reasons discussed above with respect to claim 27, applicant requests reconsideration and withdrawal of the rejection of independent claim 63 and its dependent claims 64-71.

It is believed that all of the pending issues have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this reply should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this reply, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicant submits that all claims are in condition for allowance.

Applicant : Shunpei Yamazaki et al.  
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Pursuant to 37 CFR §1.136, applicant hereby petitions that the period for response to the action dated February 1, 2006, be extended for one month to and including June 1, 2006.

The fee in the amount of \$120 for the Petition for Extension of Time fee is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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